

IN THE CLAIMS

The current claims follow. For claims not marked as amended in this response, any difference in the claims below and the previous state of the claims is unintentional and in the nature of a typographical error.

Claims 1 – 26 have previously been cancelled.

27. (Original) For use in a CDMA receiver, a noise reduction circuit for improving a signal-to-noise ratio of a received signal comprising a predetermined sequence of chips, each of said chips having a value corresponding to Logic 0 or Logic 1, said noise reduction circuit comprising:

a sampling circuit capable of generating a first sequence of samples from said received signal; and

a controller capable of identifying samples in said first sequence of samples corresponding to Logic 0 chips and identifying samples in said first sequence of samples corresponding to Logic 1 chips, wherein said controller is further capable of generating a second sequence of samples by at least one of:

shifting positions within said first sequence of samples of at least some of said identified samples corresponding to Logic 0 chips, wherein each of said shifted samples corresponding to Logic 0 chips is shifted from a first position corresponding to a Logic 0 chip to a second position corresponding to a Logic 0 chip; and

shifting positions within said first sequence of samples of at least some of said identified samples corresponding to Logic 1 chips, wherein each of said shifted samples corresponding to Logic 1 chips is shifted from a first position corresponding to a Logic 1 chip to a second position corresponding to a Logic 1 chip.

28. (Original) The noise reduction circuit set forth in Claim 27 wherein said controller adds said first and second sequences of samples to generate a composite signal having a reduced signal-to-noise ratio.

29. (Original) The noise reduction circuit set forth in Claim 27 wherein said CDMA receiver is disposed in a base station of a wireless network.

30 (Original) The noise reduction circuit set forth in Claim 27 wherein said CDMA receiver is disposed in a mobile station capable of communicating with a wireless network.

31. (Original) The noise reduction circuit set forth in Claim 27 wherein said controller shifts positions of said at least some of said identified samples corresponding to Logic 0 chips according to one of a random process algorithm and a predetermined algorithm.

32. (Original) The noise reduction circuit set forth in Claim 27 wherein said controller shifts positions of said at least some of said identified samples corresponding to Logic 1 chips according to one of a random process algorithm and a predetermined algorithm.

33. (Original) A CDMA wireless network comprising a plurality of base stations, each of said base stations comprising a noise reduction circuit for improving a signal-to-noise ratio of a received signal comprising a predetermined sequence of chips, each of said chips having a value corresponding to Logic 0 or Logic 1, said noise reduction circuit comprising:

a sampling circuit capable of generating a first sequence of samples from said received signal; and

a controller capable of identifying samples in said first sequence of samples corresponding to Logic 0 chips and identifying samples in said first sequence of samples corresponding to Logic 1 chips, wherein said controller is further capable of generating a second sequence of samples by at least one of:

shifting positions within said first sequence of samples of at least some of said identified samples corresponding to Logic 0 chips, wherein each of said shifted samples corresponding to Logic 0 chips is shifted from a first position corresponding to a Logic 0 chip to a second position corresponding to a Logic 0 chip; and

shifting positions within said first sequence of samples of at least some of said identified samples corresponding to Logic 1 chips, wherein each of said shifted samples corresponding to Logic 1 chips is shifted from a first position corresponding to a Logic 1 chip to a second position corresponding to a Logic 1 chip.

34. (Original) The CDMA wireless network set forth in Claim 33 wherein said controller adds said first and second sequences of samples to generate a composite signal having a reduced signal-to-noise ratio.

35. (Original) The CDMA wireless network set forth in Claim 33 wherein said controller shifts positions of said at least some of said identified samples corresponding to Logic 0 chips according to one of a random process algorithm and a predetermined algorithm.

36. (Original) The CDMA wireless network set forth in Claim 33 wherein said controller shifts positions of said at least some of said identified samples corresponding to Logic 1 chips according to one of a random process algorithm and a predetermined algorithm.

37. (Original) A wireless mobile station capable of communicating with a plurality of base stations in a wireless network, said wireless mobile station comprising a reduction circuit for improving a signal-to-noise ratio of a received signal comprising a predetermined sequence of chips, each of said chips having a value corresponding to Logic 0 or Logic 1, said noise reduction circuit comprising:

a sampling circuit capable of generating a first sequence of samples from said received signal; and

a controller capable of identifying samples in said first sequence of samples corresponding to Logic 0 chips and identifying samples in said first sequence of samples corresponding to Logic 1 chips, wherein said controller is further capable of generating a second sequence of samples by at least one of:

shifting positions within said first sequence of samples of at least some of said identified samples corresponding to Logic 0 chips, wherein each of said shifted samples

corresponding to Logic 0 chips is shifted from a first position corresponding to a Logic 0 chip to a second position corresponding to a Logic 0 chip; and

shifting positions within said first sequence of samples of at least some of said identified samples corresponding to Logic 1 chips, wherein each of said shifted samples corresponding to Logic 1 chips is shifted from a first position corresponding to a Logic 1 chip to a second position corresponding to a Logic 1 chip.

38. (Original) The wireless mobile station set forth in Claim 37 wherein said controller adds said first and second sequences of samples to generate a composite signal having a reduced signal-to-noise ratio.

39. (Original) The wireless mobile station set forth in Claim 33 wherein said controller shifts positions of said at least some of said identified samples corresponding to Logic 0 chips according to one of a random process algorithm and a predetermined algorithm.

40. (Original) The wireless mobile station set forth in Claim 33 wherein said controller shifts positions of said at least some of said identified samples corresponding to Logic 1 chips according to one of a random process algorithm and a predetermined algorithm.

41. (Original) For use in a CDMA receiver, a method for improving a signal-to-noise ratio of a received signal comprising a predetermined sequence of chips, each of the chips having a value corresponding to Logic 0 or Logic 1, the method comprising the steps of:

generating a first sequence of samples from the received signal; and

identifying samples in the first sequence of samples corresponding to Logic 0 chips;

identifying samples in the first sequence of samples corresponding to Logic 1 chips; and

generating a second sequence of samples from the first sequence of samples by at least one

of:

shifting positions within the first sequence of samples of at least some of the identified samples corresponding to Logic 0 chips, wherein each of the shifted samples corresponding to Logic 0 chips is shifted from a first position corresponding to a Logic 0 chip to a second position corresponding to a Logic 0 chip; and

shifting positions within the first sequence of samples of at least some of the identified samples corresponding to Logic 1 chips, wherein each of the shifted samples corresponding to Logic 1 chips is shifted from a first position corresponding to a Logic 1 chip to a second position corresponding to a Logic 1 chip..

42. (Original) The method set forth in Claim 41 further comprising the step of adding the first and second sequences of samples to generate a composite signal having a reduced signal-to-noise ratio.

43. (Original) The method set forth in Claim 41 wherein the CDMA receiver is disposed in a base station of a wireless network.

44 (Original) The method set forth in Claim 41 wherein the CDMA receiver is disposed in a mobile station capable of communicating with a wireless network.

45. (Original) The method set forth in Claim 41 wherein the step of shifting positions of the at least some of the identified samples corresponding to Logic 0 chips shifts the positions according to one of a random process algorithm and a predetermined algorithm.

46. (Original) The method set forth in Claim 41 wherein the step of shifting positions of the at least some of the identified samples corresponding to Logic 1 chips shifts the positions according to one of a random process algorithm and a predetermined algorithm.